Community Air Monitoring Workshop: Air Quality Priority: Greenleaf Desert View Power Plant

Purpose of This Document

- Summarize the Eastern Coachella Valley (ECV) Community Steering Committee (CSC) air quality concerns;
- Provide information on parts of the Community Air Monitoring Plan (CAMP), describing air monitoring strategies aimed at addressing air quality concerns near the Greenleaf Desert View Power Plant
- Gather feedback from the CSC

Community Concerns (CC)

The ECV CSC has expressed the following concerns regarding issues at and near the Greenleaf Desert View Power Plant facility that may negatively impact air quality and the life of local community members:

CC-1 The visible emissions and smoke from the facility and the limited information about the facility that is available to the community.

CC-2 Increased monitoring should be conducted at and near the facility, including fenceline monitors for criteria and toxic air pollutants and ten or more monitors strategically placed near homes and sensitive receptors near the facility. Mobile monitoring should take place to identify and quantify pollutants that occur at this facility.

CC-3 Requiring all allocations of funds from the Greenleaf Desert View Power Plant be used to reduce emissions and exposures in the ECV.

CC-4 Collaborating with CVAG, Riverside County, Greenleaf Power Plant, and Cabazon Band of Mission Indians to deploy mobile monitoring in key locations.

CC-5 Requiring Greenleaf Power Desert View Plant to incorporate mitigation measures such as planting shrubs, greenery, trees, and other native plants around the perimeter of the facility.

CC-6 Add a land use, and outreach and education section.

Proposed Air Monitoring Strategies to Address Greenleaf Desert View Power Plant

Below are proposed air monitoring strategies to address CSC concerns about the emissions from Greenleaf facility.

Goals	Proposed Air Monitoring Strategies	Current Air Monitoring Activities	Seeking CSC Input
Conduct baseline measurements and deploy a sensor network	• Evaluate currently available combustion-related emissions data to: ○ Assess how emissions from this facility contribute to the overall pollution burden in ECV ***Community Concern(s) addressed: CC-1***	• South Coast AQMD will begin assessing the available emissions data as part of the AB 617 program and CAMP implementation	• Are there any other monitoring purposes and objectives?

	• Conduct baseline measurements at the Mecca monitoring station near the facility to:
	  ○ Help determine if this facility contributes to ambient levels of air toxic contaminants
	  ○ Establish a baseline for these pollutants and assess their potential impact on the community
	
	Community Concern(s) addressed: CC-1, CC-2
		• South Coast AQMD currently operates a PM10 monitor at the Mecca (Saul-Martinez Elementary School) station.
		• Data is available in near real-time at:
		  ○ AB 617 Data Display Tool: http://www.aqmd.gov/ab617-data-display-tool/ecv
		• South Coast AQMD has conducted chemical speciation (i.e. metals and ions) analyses of PM10 filter samples collected in ECV. South Coast AQMD is exploring opportunities to continue and potentially expand PM10 chemical speciation measurement at the Mecca site.
			• Are there any other monitoring purposes and objectives?
			• Input on pollutants of interest
			• Input on air toxic species for baseline measurements at Mecca site

	• Seek new opportunities and work with the CSC to expand air quality sensor deployments in ECV to: ○ Capture potential PM2.5 emissions from this facility, if	• South Coast AQMD will begin sensor deployment as part of the AB 617 program and CAMP implementation	• Are there any other monitoring purposes and objectives? • Input on locations • Input on the size of the sensor network

	appropriate, under a variety of wind conditions ***Community Concern(s) addressed: CC-1, CC-2***		• Input on CSC and/or community participation and hosting the sensors • Input on the timeline • Input on data dashboard

Assembly Bill 617 (AB 617) Eastern Coachella Valley Community
South Coast Air Quality Management District

Input Gathering Worksheet for Air Monitoring of the Greenleaf Desert View Power Plant Facility

Please list any air pollutants other than PM that you think may be associated with emissions from this facility that could potentially affect air quality in the community.

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Please provide information and suggestions on potential locations for deploying sensors for PM measurements. Feel free to include a list of community members who may be willing to host a sensor at their private residence (NOTE: each sensor will measure PM, NO2 and O3).

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Please provide input regarding mobile monitoring as a strategy to address concerns of emissions from this facility.

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Please provide any input you may have regarding other monitoring purposes and objectives for the Greenleaf Desert View power plant.

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Note: Information provided by you on this worksheet (including contact or other personal information) is a public record and may be released in response to a California Public Records Act request.

CAMP Subchapter on Greenleaf Power Desert View Power Plant

The CSC expressed their concerns regarding the Greenleaf Power Desert View Power Plant (formerly Colmac Energy, Inc.), because of visible emissions and smoke from the facility. This facility is a biomass electrical generation facility that has been operating since 1992 and is located on the Cabazon Band of Mission Indians Reservation at 62300 Gene Welmas Dr, Mecca, CA 92254. This plant is subject to U.S. EPA regulations and uses emission control devices and measures to reduce nitrogen oxides (NOx), sulfur oxides (SOx), and PM emissions.

To address the CSC concerns, South Coast AQMD staff will evaluate currently available combustion related emissions data to help assess how emissions from the Greenleaf power plant contribute to the overall pollution burden in ECV. Based on these findings and if additional monitoring is necessary, South Coast AQMD staff will implement an appropriate monitoring strategy that focuses on measuring relevant pollutants near the facility and close to sensitive receptors (e.g., schools).

This power plant is operating all year round and, therefore, a monitoring strategy based on fixed monitoring will be adopted. Fixed monitoring allows for a more comprehensive characterization of air pollution trends over an extended period of time, although it only provides air quality information when the monitoring locations are downwind of the source. Currently, South Coast AQMD operates one fixed monitoring site (Mecca air monitoring station) near the Greenleaf power plant; this site is located within the perimeter of Saul Martinez Elementary School and approximately one mile southeast to the power plant (Figure 7.2). An analysis of the wind direction gathered during the last three years shows that the air monitoring station in Mecca was downwind of the power plant more than 50% of the time (Figure 7.2) and, hence, this is a suitable site for exploring the impact of Greenleaf emissions on the surrounding community.

Since the general monitoring approach for ECV relies on creating an air quality sensor network, South Coast AQMD will work with the CSC to identify strategic locations for deploying these sensors to capture potential PM2.5 emissions from this facility, if appropriate, under variety of wind conditions.

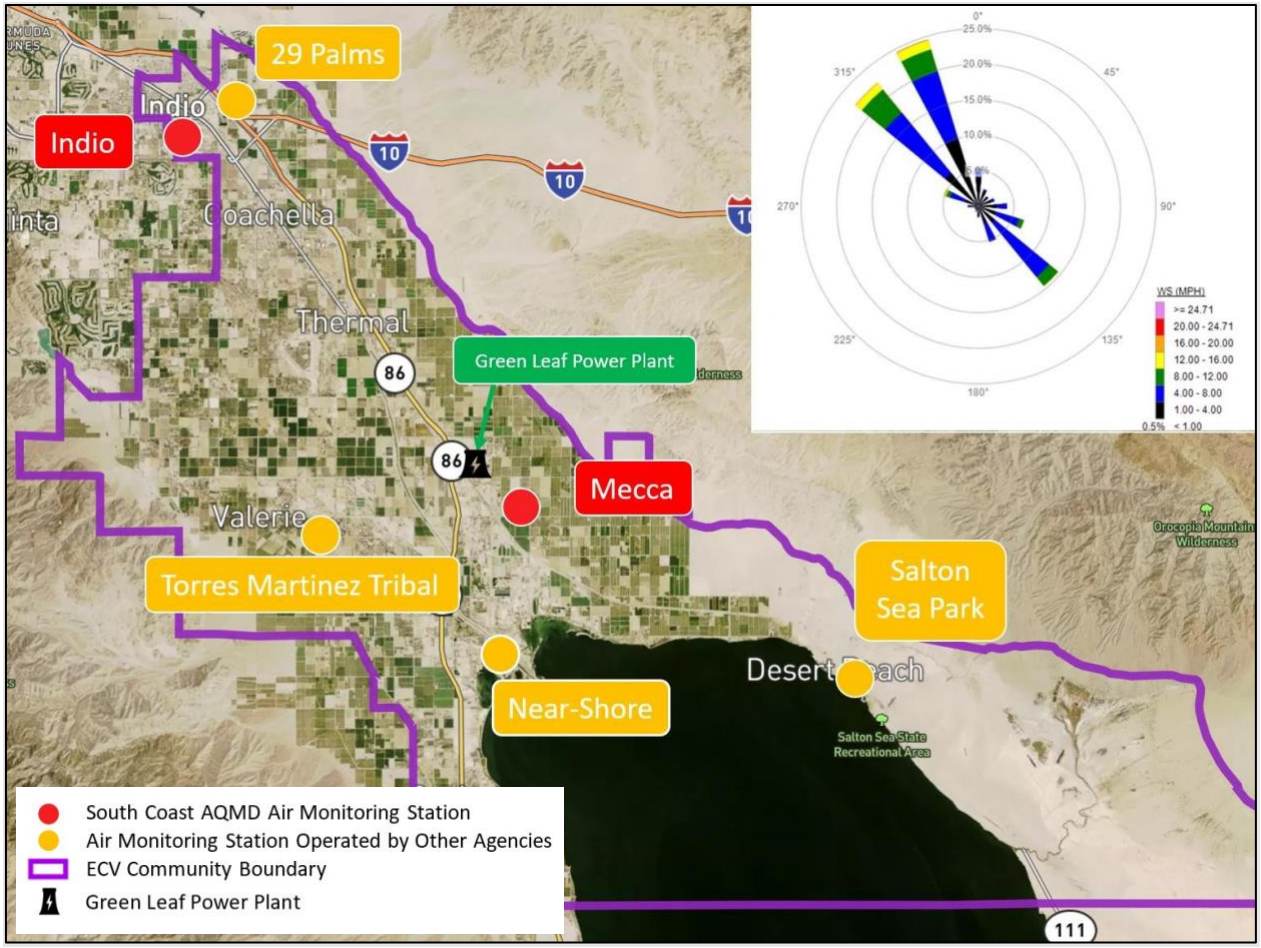

Figure 7.2 - Monitoring stations in ECV and the location of Greenleaf power plant. The wind rose shows the hourly averaged wind direction and speed at Mecca monitoring station